

CKIT 94 UPGRADE

Wow! What an upgrade. This upgrade packet will bring you up to speed on all the new features of the Compression Kit 94 (CKit).

If you are a veteran user -- Most of the new features take place behind the scenes; within the same menus you have grown accustomed to. So open up your old manual, add this upgrade packet, and boot up. You already know how to use the CKit 94!

If you are a new user -- The CKit is menu driven. For a quick introduction to the CKit, please refer to Quick Start in Chapter 3 of the manual. After completing this short chapter, you will feel like an old pro!

Either way, you will find that the original v1.XX manual is a valuable reference; since the CKit 94 Upgrade operates almost identically.

SECTION	DESCRIPTION	PAGE
Part A - Changes	Describes new features of the CKit 94	2
Part B - RAMTest	Documentation for the new RAMTest utility	10
Part C - Dissolver	Documentation for the new Dissolver utility	11
Part D - Decomper	Documentation for the new Decomper utility	16
Part E - Trouble Shooting II	New trouble shooting tips	17

Thank You

Gene would like to thank Jeff Jones of LOADSTAR Magazine for his valuable insights which contributed to many of the improvements found in this version of the CKit.

Gene would also like to thank Gaelyne Moranec and Jack Vander White of CEE-64 Alive! for their strong support.

The entire staff wishes to thank all of the special Commodore users who have given us their full support through their purchases, comments, and requests; this upgrade is dedicated to you.

■ Part A - CHANGES

With the release of the Compression Kit 94 Upgrade (CKit), a number of improvements have been made to the original. This section covers these changes in detail.

Recommended System

The CKit is designed for advanced Commodore 64 and 128 systems. In order to fully utilize all of the CKit's abilities Mad Man Software recommends the following system as a minimum:

ONE OF THE FOLLOWING COMPUTERS
Commodore 64, 64C, 128, or 128D
AND ONE OF THE FOLLOWING RAM DEVICES
CMD RAMLink, PPI RAMDrive, or a 17XX REU with JiffyDOS
AND AT LEAST ONE OF THE FOLLOWING DRIVES
Commodore 1541/1571/1581 or any CMD Storage Device

Although the CKit will operate fine on systems which do not meet the above recommendation, its abilities will be limited.

REVIEWERS: The CKit is designed specifically for systems which meet the above published recommendation. You should not use the fact that the CKit will allow you to use a lesser system as a basis for review on that system. Since many of the CKit's advanced features are not accessible on lesser systems, a review based on such a system would do both your readers and Mad Man Software an injustice.

RAM Device Support

The CKit is designed and tested to work with the following RAM devices:

RAM DEVICE	CAPACITY
Commodore 128 VDC RAM	Both 16K and 64K RAM Configurations
CMD RAMLink	First DACC Partition (up to 16Meg RAM)
PPI RAMDrive	First DACC Partition (up to 16Meg RAM)
Commodore 17XX REU	Stock and Expanded Units (up to 16Meg RAM)
CLD Super 1750 Clone	Full 512K RAM

Installation Notes

IMPORTANT: If you have a CMD RAMLink, PPI RAMDrive, or CMD Hard Drive, **INSTALL THE CKIT ON IT!** After installation, the CKit will never ask you to insert the Program Diskette again. If you want to install the CKit on a CMD Floppy Drive, install it on your work disks (the same disks you intend to use the CKit on). In all other cases, place the CKit main disk in the drive you use the least.

CMD RAMLink & PPI RAMDrive Installation

1. Using the utility RAM-TOOLS which came with your RAMLink/RAMDrive, create a Native partition with a recommended size of (768) blocks. The CKit will work perfectly in 1541/1571/1581 Emulation partitions, but it performs at optimum speed in Native partitions.
2. If you have not already done so, create a DACC partition with a recommended minimum size of (768) blocks. Be aware that the CKit will always use the first DACC partition found in memory, NOT necessarily the lowest numbered DACC partition.
3. After creating the new partition(s), exit RAM-TOOLS, and follow steps (1) through (4) in Commodore 1581 Installation (Chapter 4).
4. Move the light bar to the word "Drive" in the section labeled Destination. Tap the [return] key until the CKit chooses your RAMLink/RAMDrive, and places the correct information next to the word "Drive".
5. Move the light bar down one position to the word "Part". Tap the [return] key until the Native partition which you created appears next to the word "Part".
6. Go to step (7) above in Commodore 1581 Installation (Chapter 4).

Systems Check

Whenever the CKit is first booted or reset, it will perform a series of checks on your Commodore system.

1. Checks for the Security Key. If the Security Key is not present, the CKit will remind you, and give you a chance to plug in the key.
2. Checks for what type of computer is present (a Commodore 64 or 128).

CHANGES

3. Checks if you have a CMD RAMLink or PPI RAMDrive DACC partition present. If one is found, the CKit checks for and displays the size of the partition.
4. Checks for a Commodore 17XX REU. If one is found, the CKit checks for and displays the size of the REU.

WARNING: This check destroys the entire contents of the REU. This is necessary in order to determine the REU's compatibility and size.

5. If a Commodore 128 was detected, checks for the amount of VDC RAM present (16K or 64K) and displays the result.

NOTE: At this point the CKit will initialize the RAM device setup to best fit your system. If you wish to view or change this default setup, use the Settings option.

Friendlier Quit

You can now run BASIC programs as well as issue DOS commands and safely return to the CKit with the SYS4 safety feature. Be aware that if a BASIC program manipulates non-BASIC memory (through machine language subroutines, POKEs outside of the I/O page, etc.), you may not be able to return to the CKit.

Settings

Settings is a new option located in the Server menu. Settings allows you to select the compression speed if you have a Commodore 128 and it allows you to customize the CKit's use of expansion memory. Select the Settings option to enter the Settings menu. The Settings menu has five options:

OPTION
Enable 2MHz Mode w/Screen Blank
Enable DACC Partition Use
Enable 17XX REU Use
Enable VDC RAM Use
Test Enabled RAM Devices

Use the light bar to select the setting you wish to change, then press [return]. Press the [←] the abort key to return to the Server.

If you select Enable 2MHz Mode (available for Commodore 128's only), the CKit will blank the screen and place your 128 into Enhanced 2MHz Mode during the compression and decompression portions of a job. This option essentially doubles the compression speed. Keep in mind that the CKit must kick down to 1MHz Mode in order to perform any file or drive access (a limitation of Commodore DOS - not the CKit); so the speed gain may not be as high as you might expect.

If you select Enable DACC Partition Use, the CKit will utilize the first DACC partition found on your CMD RAMLink or PPI RAMDrive for buffer use.

CMD RAMLINK USERS: If you wish to use a 17XX REU and a DACC partition concurrently, make sure that the DACC partition does not use the REU's RAM space. Use the RAMTest utility to insure proper setup.

If you select Enable 17XX REU Use, the CKit will utilize your entire REU for buffer use.

If you select Enable VDC RAM Use (available for Commodore 128's only), the CKit will utilize your 128's VDC RAM for buffer use.

If you select Test Enabled RAM Devices, the CKit will load up the RAMTest utility and test your current RAM setup. RAMTest is a full fledged testing utility. Mad Man Software recommends that you run this utility for at least an hour with the RAM setup you intend to use with the CKit. If there are any problems with your setup, RAMTest will identify it (please refer to Part B - RAMTest for more information).

RAMTest

RAMTest is a new utility accessed through the Settings option. Please see Part B - RAMTest for more information.

Filemaster

The Filemaster now supports the view and selection of up to (1200) files.

CHANGES

Procopy

Procopy now supports copying disks directly from RAM. If the Destination is a Commodore 1541/1571/1581 disk drive or a CMD Floppy Drive in 1581 Mode AND the copy was made in just one pass, then Procopy will ask if you would like to make another copy. If you select yes, the next copy will be made directly from RAM.

Archiver

The Archiver features the improved CKit filenames system, including support for MS-DOS style filenames at creation time. The Archiver now supports the view and selection of up to (750) files. You may also select limits in (100) block increments all the way up to (1000) blocks.

Dissolver

The Dissolver is a new utility which allows you to convert CKit archives of (192) blocks or less into self-dissolving-archives (MAD files). It can also view the contents of the MAD files it creates. Please see Part C - Dissolver for more information.

1541/1571/1581 Disk Boas

The Disk Boas feature the improved CKit filenames system, including support for MS-DOS style filenames at creation time. The limits that you may select have also been expanded. Please review the table below:

DISK BOA	LIMITS
1541 Disk Boa	NONE, (100), (200), (300), ... , (600)
1571 Disk Boa	NONE, (100), (200), (300), ... , (1300)
1581 Disk Boa	NONE, (200), (300), (400), ... , (3200)

CMD Native Boa

The CMD Native Boa now supports MS-DOS style filenames at creation time. The limits you may now select are (NONE), (100), (200), (300), ... , (20000). Do not select a limit which is larger than your Destination disk or partition size. Please refer to the chart below for Mad Man Software's new suggested limits.

SUGGESTED CMD NATIVE BOA LIMITS	
DESTINATION DISK TYPE	LIMIT
1541 5.25" SS/DD Disk	600
1571 5.25" DS/DD Disk	1300
1581 3.5" DS/DD Disk	3200

DATA FILE GENERATION (WORST CASE ANALYSIS)				
PARTITION SIZE		NUMBER OF DATA DISKS/FILES		
TRACKS	BLOCKS	1541 DISKS LIMIT 600	1571 DISKS LIMIT 1300	1581 DISKS LIMIT 3200
1	256	1	1	1
5	1,280	3	1	1
10	2,560	5	2	1
50	12,800	22	10	4
100	25,600	43	20	8
255	65,280	109	51	21

Decomper

The Decomper is a freely distributable version of the CKit that can decompress any archive or boa that you create. Please see Part D - Decomper for more information.

Improved CKit Filenaming

The CKit no longer uses trailing spaces for single archive or boa files. It now uses a hyphen, "-". Examples:

```
"backup files]ca-"
"game disk   ]c4-"
```

CHANGES

The CKit now has built-in support for MS-DOS style naming. MS-DOS style naming is very similar to the CBM style naming covered in the manual. The only differences are that the filename can be anything from one (1) to eight (8) characters in length AND that the extension character is a "." instead of a "]". Examples:

```
"zipped.ca-"  
"geosfont.c8-"  
"i.ca-"
```

```
"bigboy.c7b"  
"bigboy.c'a"  
"bigboy.c'b"
```

MS-DOS style naming insures that CKit files will work flawlessly with MS-DOS based bulletin board systems (BBS's).

Compression Techniques

There are several different methods for compressing data. For maximum data compression, pure statistical compression is the best method; where a program analyzes the data, selects a compression scheme that best fits the data, then re-reads the data applying the selected compression scheme to it. This method requires two passes of the source data (popular public domain compression programs such as ARC and Super Crunch use this method). A comparable method, adaptive statistical compression, requires only one pass; it analyzes the data during compression and adjusts the compression scheme on the fly (this same method is used by high performance modems). Although pure statistical compression offers the best compression ratio (especially for smaller files), adaptive statistical compression offers superior speed with comparable performance. Since the CKit is designed to be a backup utility with reasonable speed, Mad Man Software chose to use the latter, adaptive statistical compression.

Compressing Files

Due to the nature of the CKit's compression scheme, the compression of a file improves after each byte it compresses. So large files benefit the most, and often see the best compression; in some cases even better than traditional statistical compression. Just remember, "the larger the file the better the compression."

Keep in mind that the compression performance will also vary between different file types. Large graphics and text files tend to see the best compression. Large BASIC programs also compress well. And machine language programs tend to compress the least of all the file types.

With some practice, you will develop a feel for the compression that you can expect from different file sizes and types.

Telecommunications Use

No other Commodore utility, commercial or in the public domain, offers the reliability of the CKit. The CKit offers a compression standard that is guaranteed to work. When you successfully complete an archive or a job with verify, you can rest assured that any Commodore user can decompress it.

With the newly designed Dissolver and Decomper utilities, user groups and bulletin board operators can offer their members unparalleled Commodore support; allowing them to decompress archives, 1541 disks, 1571 disks, 1581 disks, and even CMD Native partitions with ease. With the freely distributable Decomper, your users will be downloading files from your system like it's their job! No longer will you have to waste time explaining how to decompress archives and the like (one program does it all - the Decomper). Let's not forget the Dissolver. The Dissolver converts CKit archives into self-dissolving-archives (MAD files). All the user has to do to decompress one is LOAD it and RUN it; just like a BASIC program. Even better, creating MAD files has never been simpler. Just select the archives that you wish to convert and BAMPH! You're done. The Dissolver even has a verify option to insure proper creation.

Why are these utilities so great? Because you designed them. You told Mad Man Software what you wanted and guess what? You got it. So use it. And help us out by telling your fellow users about it.

■ Part B - RAMTEST

RAMTest is an extensive testing utility designed to evaluate your current RAM device setup. If there is anything wrong with your current setup, RAMTest will detect it. To boot RAMTest select "Test Enabled RAM Devices" in the Settings menu.

WARNING: RAMTest is a destructive testing utility. Any data stored in the enabled DACC partition, 17XX REU, and VDC RAM - WILL BE DESTROYED.

Job (Screen)

Once selected, RAMTest jumps right into the Job (Screen). The Job (Screen) has three main sections. The top section is labeled Job. The text, "Test Enabled RAM Devices" appears here. The middle section labeled Status, is used to keep track of the current job in progress. And the bottom section labeled Buffer, helps you monitor the job's use of the current RAM setup.

The first message you will see in the Status area is, "Begin Job - Are you sure (y/n)?" If you select [n] no, RAMTest will return you to the Settings menu. If you select [y] yes, then RAMTest will begin the job.

Before RAMTest begins testing, it will warn you of the destructive nature of the test. Press [return] to continue the job. Press [stop] if you wish to cancel the job.

After you press [return], RAMTest begins its testing cycle. RAMTest will continue this testing cycle until you stop it. When you wish to end the test and see a test report, press the [stop] key. Mad Man Software recommends that you test the RAM setup you intend to use with the CKit for at least an hour (preferably overnight).

Report (Screen)

In between each test cycle and when you end the test through the use of the [stop] key, RAMTest displays its Report (Screen).

The Report (Screen) lists the number of tests performed, DACC/REU conflicts detected, and device detection errors that occurred. RAMTest also features a RAM device error table. In this table, each RAM device is individually listed. Each enabled RAM device has a check mark to the left of the device name. To the right of the device name is the number times RAMTest detected the device, the number of addressing errors that occurred, and the number of integrity errors that occurred. Should an error of any kind occur, the faulty RAM device will be highlighted in RED.

At the bottom of the Report (Screen) is a RAMTest summary. The words, "SETUP PASSED" guarantees that your current RAM setup will work with the CKit.

■ Part C - DISSOLVER

The Dissolver is a new Compression Kit (CKit) utility which allows you to easily create what are known as self-dissolving-archives (MAD files). MAD files are popular since they are easy for beginners to use. To decompress a MAD file, all the user must do is LOAD the file and RUN it; just like a BASIC program. The archive will automatically decompress itself. Additionally, the Dissolver allows you to view the contents of these MAD files.

NOTE: The Dissolver converts archives created by the Archiver into MAD files. The archives must be no larger than (192) blocks each.

How The Dissolver Works

The Dissolver copies about eight blocks of decompression code to a file; then it copies the archive you selected to the end of that file. So each MAD file will be about eight blocks larger in size than the original archive. If you are creating several archives, it might be better to leave the archives in their original format and just include a copy of the new freely distributable Decomper with them.

Dissolver Extensions

The Dissolver uses the same filename style as the archive it is converting and simply changes the extension to a "mad". Please study the examples below:

SOURCE ARCHIVE FILENAME	DESTINATION DISSOLVER FILENAME
"bad poetry]ca-"	"bad poetry]mad"
"Rap Music]ca-"	"Rap Music]mad"
"copiers.ca-"	"copiers.mad"
"stp.ca-"	"stp.mad"

Notice that only archives with the "]ca-" and ".ca-" extensions are used. For more information, please refer to Improved CKit Filenaming in Part A - Changes.

Using The Dissolver

Like the Filemaster, there are three basic steps you must take whenever you use the Dissolver:

1. Select the job (convert archives or examine).
2. Select the files for the job.
3. Monitor the job.

DISSOLVER

Each step has its own screen. The following text details each step in this process.

1. Select Job (Screen)

When you first enter the Dissolver from the Drive Selector you are given a short list of possible jobs:

OPTION	DESCRIPTION
Convert Archives	Converts CKit archives into CKit MAD files
Examine MAD (Source)	Views the contents of CKit MAD files in the Source directory
Examine MAD (Dest)	Views the contents of CKit MAD files in the Destination directory

Before you select a job, INSERT YOUR SOURCE AND DESTINATION DISKS (IF YOU ARE USING ONLY ONE DRIVE INSERT YOUR SOURCE DISK). To select a job, use the cursor keys to highlight the job that you want with the green light bar, then press [return]. Press [←] the abort key to return to the Drive Selector.

Select Drive Mode (Convert Archives)

If the Source and Destination drives are defined as the same Commodore 1581 or CMD Floppy Drive, then the Select Drive Mode menu will appear on the screen. If the Source and Destination partitions (and/or paths) are on the SAME disk, select [1] Single Disk. If the Source and Destination partitions (and/or paths) are on SEPARATE disks, select [2] Disk To Disk. If you wish to return to the Select Job (Screen), press [←] the abort key.

SPECIAL CASE: If the Source and Destination drives are defined as the same CMD Floppy Drive AND the Source is in a different mode than the Destination, then the Dissolver will automatically skip this menu. For example, if the Source is in 1581 Mode and the Destination is in CMD Partitionable Mode then the Dissolver would skip this menu.

Convert Archives

Once you select the Convert Archives option, the Dissolver will scan the Source directory for the first (750) valid files with the ".ca-" and ".ca-" extensions that have sizes of (192) blocks or less. If no valid files are present, the Dissolver will display a brief error message, and return you to the Select Job (Screen). If the Dissolver finds any valid files, it will switch to the Convert Select Files (Screen).

2. Convert Select Files (Screen)

There are three important areas on this screen. At the top is the status area. The status area informs you of the number of selected files and blocks, the verify status, and the current copy mode. The large window directly beneath the status area, is the file list. Off to the right of the file list is a brief list of keystroke commands.

To scroll through the file list, use the cursor keys. Markers are used at the top and bottom of the file list window. These markers indicate whether or not you have reached the top or bottom of the file list. If you press the [return] key, the Dissolver will select the file that is currently highlighted by the light bar, and move the light bar down one position. Selected files are highlighted in RED, and unselected files are highlighted in WHITE.

[F1] Begin Job

After you finish selecting the files for the job, use this command to move on to the Convert Job (Screen). If no files are selected the Dissolver will ignore this command.

[t] Toggle

This command allows you to select all of the files with a single keystroke. If you have already selected all of the files, this command will deselect all of the files.

[v] Verify

This command allows you to turn the verify feature ON and OFF. The current status of the feature can be found next to the word "Verify" in the status area.

[m] Mode

This command selects one of the following copy modes available:

DISSOLVER

MODE	DESCRIPTION
ASK	Upon each occurrence, asks if you wish to replace the file
REPLACE	Replaces files which have the same filename
SKIP	Skips files that already exist

The current copy mode is listed next to the word "Mode" in the status area. The mode tells the Dissolver how to deal with MAD files that already exist on the Destination with the same filename.

[←] Abort

This key returns you to the Select Job (Screen).

Non-Listed Commands

[home] (move light bar to the top entry in the file list)

[shift][home] (move light bar to the last entry in the file list)

[shift][return] (select file and move the light bar up one position)

3. Convert Job (Screen)

The Convert Job (Screen) has three main sections. The top section is labeled Job. The job you selected (Convert Archives) appears in this section. The middle section labeled Status, is used to keep track of the current job in progress. And the bottom section labeled Buffer, helps you monitor the job's use of the current RAM setup.

The most important section on the Convert Job (Screen) is the status area. All of the user prompts and messages are placed here. The first message you will see is, "Begin Job - Are you sure (y/n)?" If you select [n] no, the Dissolver will return you to the Convert Select Files (Screen). If you select [y] yes, then the Dissolver will begin the job.

Once the job begins, you always have the option of canceling the job by holding down the [stop] key. Should the Dissolver run into any problems or need to swap disks, it will inform you in the status area. Follow the instructions and prompts which appear in this area until the job is complete. If you run into any serious problems, please refer to Chapter 12.

IMPORTANT: The Dissolver has no way of knowing how much disk space is available on the Destination. If the Dissolver runs out of disk space, it will **ABORT** the job. Therefore, you must always pre-check the Destination (partition or disk) for adequate disk space before beginning a job.

Examine MAD (Source & Dest)

This handy option allows you to view the contents of MAD files created by the CKit.

This option works exactly like the Archiver's Examine Archive option, except that it works with MAD files which have ".jmad" and ".mad" extensions.

NOTE: If you need more help or information please refer to the Examine Archive option in Chapter 9.

■ Part D - DECOMPER

The Decomper is your connection to those Commodore users who do not have a copy of the Compression Kit (CKit). The Decomper is single file located on the CKit Program Diskette:

`"decomper.mms"`

The Decomper is like a miniature version of the CKit and it is freely distributable. You may distribute as many copies as you please. The only restrictions:

1. No fee may be charged for such copying and distribution.
2. The Decomper may only be distributed in its original, unmodified state.

The Decomper can decompress ANY archive or boa that was created with the CKit.

Features

- Commercial quality - Guaranteed to work
- User friendly - Menu driven
- Written in 100% machine language
- LOAD's and RUN's just like a BASIC program
- Includes fast drive routines for Commodore 1541/1571/1581 drives

The Decomper offers your user group or bulletin board system (BBS) a professional front end unsurpassed in the Commodore world for quality, power, and ease of use. Mad Man Software encourages you to use the CKit extensively, in your products, distribution disks, and BBS's.

If you have any ideas on how we can serve you better, please contact us. But be careful of what you ask for. You might just get it.

■ Part E - TROUBLE SHOOTING II

Unresponsive Drives

If a disk drive seems to lockup on a job AND the drive's activity light is still on try this:

UNRESPONSIVE DRIVE RECOVERY PROCESS

1. Pull the disk completely out of the drive.
2. Wait a second or two.
3. Place the disk back into the drive.
4. When and if the bad sector message pops up, use the retry option.

This process works great on CMD Floppy Drives. This process can not be used on CMD RAMLinks, CMD Hard Drives, or PPI RAMDrives.

Intermittent Or Quirky Operation (RAM Devices)

The CKit assumes that you have a properly installed and stable RAM device setup. If you do not, the CKit will act strangely each time it tries to access the faulty RAM device (system lockups, READY screens, cold start resets, etc.). The best way to insure that the CKit will work properly with your setup is through the use of the RAMTest utility located in the Settings menu. If your setup can pass the RAMTest utility consistently over long periods of time, you should never experience any of these problems.

Job Lockup (Security Key)

If the computer just locks up in the middle of a job, chances are that the computer is not responding to the Security Key correctly. The causes could be:

- ☐ Security Key is not plugged into joystick port #1
- ☐ Security Key is not securely set in the joystick port
- ☐ The joystick port is damaged
- ☐ Computer has a defective CIA chip (6526)
- ☐ Computer has a defective SID chip (6581)

Most of the time, this problem occurs when you forget to plug in the Security Key and happen to have a mouse in one of the joystick ports. If the computer has a defective CIA chip, the keyboard should also act strangely. If the computer has a defective SID chip, you may notice irregular sounds when using programs which play music. In any case, the best way to identify whether your computer is defective or not is to try using the CKit on a different computer. If it works, you know that the problem lies with the computer (not the CKit). Should you not be able to correct the problem, please contact Mad Man Software.

TROUBLE SHOOTING II

Job Errors Update

ERROR:Track <t> is corrupted
Continue Job (y/n)?

The Destination drive did not copy the track correctly. This error is often caused by faulty disks and badly aligned drives. If you encounter this error, Mad Man Software recommends that you start the job over and use a different Destination disk (if possible).

ERROR:Track <t> in boa is corrupted
Continue Job (y/n)?

The data for track <t> in the boa data file is corrupted. This is usually caused by a corrupted boa data file (not the Destination drive).

ERROR:Track <t> in boa is severely corrupted [return]

The data for track <t> in the boa data file is severely corrupted. This is usually caused by a corrupted boa data file (not the Destination drive) AND it is non-recoverable.

ERROR:File exists [return]

There is another archive or boa file on the Destination drive with the same filename. Solution - Use a different filename for the archive or boa OR delete the old file(s).

ERROR:Job too large for available RAM
[return]

This error occurs if you attempt to archive a large number of files without any sort of RAM device present on the system. Solution - Enable one of your RAM devices (using the Settings option in the Server) or break the archive job up into smaller jobs.

ERROR:Buffer corruption detected
[return]

The utility has detected corrupted data within the present RAM setup. This error will occur on any RAM setup (selected in the Settings menu) which can not pass the RAMTest diagnostic utility on a consistent basis. This error is usually caused by improper installation of C128 64K VDC RAM, CMD RAMLinks, and PPI RAMDrives; and expanded 17XX REU's which drain too much power from the computer.

ERROR:Archive requires a different version than v2.0 [return]

The archive you have selected must be decompressed with a different version of the CKit. Please contact Mad Man Software for CKit upgrade information.

ERROR:Boa requires a different version than v2.0 [return]

The boa you have selected must be decompressed with a different version of the CKit. Please contact Mad Man Software for CKit upgrade information.

